AMENDMENT TO THE CLAIMS

1. (*Currently Amended*) A ~~method of operating an internal combustion engine comprising the steps of: (1) supplying a~~ fuel composition ~~to an engine wherein said fuel composition comprises a fuel, and an additive composition,~~ comprising:

a Mannich reaction product of

a) a polyisobutylene alkylated hydroxyaromatic compound;

b) formaldehyde or a reactive equivalent thereof; and ~~an aldehyde; and~~

c) a secondary monoamine component comprising dimethylamine; ~~amine containing at least one reactive amino group,~~

wherein the said polyisobutylene alkylated hydroxyaromatic compound is derived from a combination of a conventional polyisobutylene and a high vinylidene polyisobutylene; and wherein the said polyisobutylene alkylated hydroxyaromatic compound is derived by:

i) combining the conventional polyisobutylene and the high vinylidene polyisobutylene prior to the alkylation of the hydroxyaromatic compound; or

ii) combining a hydroxyaromatic compound alkylated with the conventional polyisobutylene and a hydroxyaromatic compound alkylated with the high vinylidene polyisobutylene;

wherein the ratio of conventional polyisobutylene to high vinylidene polyisobutylene is from 25:75 to 40:60 on a weight basis; and

wherein the Mannich reaction product is present in the fuel composition from 10 to 10,000 ppm.

2. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the conventional polyisobutylene has a trisubstituted double bond isomer content of 45 mole % or greater.

3. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the high vinylidene polyisobutylene has a combined alpha- and beta-vinylidene double bond isomer content of 70 mole % or greater.

4. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the polyisobutylene of the alkylated hydroxyaromatic compound has an alpha- and beta-vinylidene double bond isomer content of 50 to 95 mole % and a trisubstituted double bond isomer content of 4 to 40 mole %.

5. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the said polyisobutylene is derived by combining the conventional polyisobutylene and the high vinylidene polyisobutylene prior to the alkylation of the hydroxyaromatic compound.

6. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the said polyisobutylene is derived by combining a hydroxyaromatic compound alkylated with the conventional polyisobutylene and a hydroxyaromatic compound alkylated with the high vinylidene polyisobutylene.

7. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the said polyisobutylene is derived by combining a Mannich reaction product from a hydroxyaromatic compound alkylated with the conventional polyisobutylene and a Mannich reaction product from a hydroxyaromatic compound alkylated with the high vinylidene polyisobutylene.

8. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the said polyisobutylene has a number average molecular weight ranging from 500 to 3,000.

9. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein the hydroxyaromatic compound is phenol, the aldehyde is formaldehyde or a reactive equivalent thereof, and the amine is a secondary monoamine, an alkylenediamine, or a mixture thereof.

10. – 19. (*Cancelled*)

20. (*Currently Amended*) The fuel composition ~~method~~ of claim 1 wherein said conventional polyisobutylene is derived from a process that uses an $AlCl_3$ catalyst and

wherein said conventional polyisobutylene has an alpha- and/or beta-vinylidene double bond isomer content of 30 mole percent or less; and

wherein said high vinylidene polyisobutylene is derived from a process that uses a BF_3 catalyst and wherein said high vinylidene polyisobutylene has an alpha- and/or beta-vinylidene double bond isomer content of 80 mole percent or more.

21. (***Currently Amended***) The fuel composition ~~method~~ of claim 1 wherein the ratio of conventional polyisobutylene to high vinylidene polyisobutylene is from 10:90 to 40:60 on a weight basis and wherein the Mannich additive is present in the fuel composition from 10 to 1,000 ppm.

22. (***Currently Amended***) The fuel composition ~~method~~ of claim 20 wherein the ratio of conventional polyisobutylene to high vinylidene polyisobutylene is from 10:90 to 40:60 on a weight basis and wherein the Mannich additive is present in the fuel composition from 10 to 1,000 ppm.

23. (***Currently Amended***) The fuel composition ~~method~~ of claim 20 wherein the amine comprises a secondary monoamine containing from 0 to 22 carbon atoms, an alkylenediamine containing more than 2 carbon atoms, or a mixture thereof; and wherein the aldehyde comprises a aliphatic aldehyde.

24. (***Currently Amended***) The fuel composition ~~method~~ of claim 21 wherein the amine comprises a secondary monoamine containing from 0 to 22 carbon atoms, an alkylenediamine containing more than 2 carbon atoms, or a mixture thereof; and wherein the aldehyde comprises a aliphatic aldehyde.

25. (***Currently Amended***) The fuel composition ~~method~~ of claim 22 wherein the amine comprises a secondary monoamine containing from 0 to 22 carbon atoms, an alkylenediamine containing more than 2 carbon atoms, or a mixture thereof; and wherein the aldehyde comprises a aliphatic aldehyde.

Claims 26. to 32. (***Cancelled***)